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## Patent Abstracts of Japan

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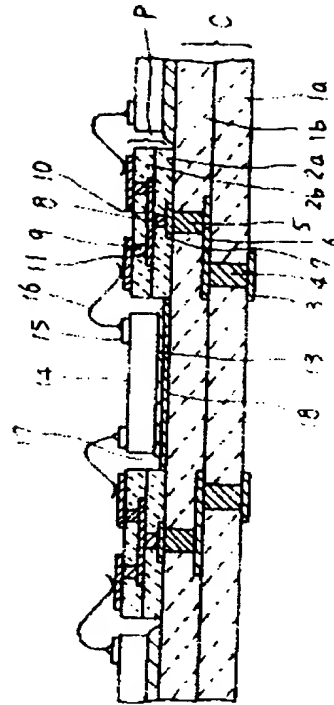
APPLICATION DATE : 21-12-84  
APPLICATION NUMBER : 59270443

APPLICANT : FUJITSU LTD;

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TITLE : SEMICONDUCTOR DEVICE



**ABSTRACT :** PURPOSE: To prevent temperature increase in a semiconductor chip and to prevent the deterioration of performance, by directly fixing a semiconductor chip on a ceramic substrate having high heat conductivity through a heat radiating body, and increasing heat radiation through the substrate.

CONSTITUTION: A semiconductor chip 14 is mounted on the upper surface of an upper ceramic layer 1b of a multilayer ceramic wiring substrate C. A die stage 18 is formed by a thick metal film in a region where the chip 14 is to be mounted beforehand. A wiring is not formed in a region, where a chip inserting hole 17 is to be formed in a multilayer polyimide wiring substrate P. On the polyimide wiring substrate P, a silicon oxide mask film having an etching hole corresponding to the hole 17 is formed. Polyimide layers 2b and 2b', which are surfaced in the etching hole, are removed. The region, where the die stage 18 is arranged on the upper surface of the ceramic layer 1b, is selectively exposed. The semiconductor chip 14 is fixed on the stage by a metal conducting paste 13.

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